# ABSTRACT

A bridge controller controls the data flow to/from a USB bus to/from an ATA/ATAPI drive, such as an ATA hard drive or ATAPI CD or DVD drive. The bridge controller has a state machine which receives the CBW in a background mode in real time as the packet is being transferred to the bridge controller. The state machine uses the CBW to set up the data transfer. The bridge controller also has a programmable processor which is coupled to the CBW once it is received in a buffer memory. The programmable processor makes changes in the set up of the receiving device for the transfer, if needed, and initiates the data transfer.